

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2018
(Fifth Semester)

Branch - **BIOCHEMISTRY**

METABOLISM - II

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 What is a-oxidation?
- 2 Write the characteristic feature of Fatty acid synthetase complex.
- 3 What are Gangliosides? Give examples.
- 4 Mention the role of Phospholipase.
- 5 Write the reaction of Non Oxidative deamination?
- 6 How is glycine catabolised?
- 7 Name the endproduct of Purine catabolism.
- 8 Write the structures of Adenine and Uracil.
- 9 Write the structure of Creatine. Mention its importance.
- 10 What do you mean by Xenobiotics? -

SECTION - B (25 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Write a note on the biosynthesis of unsaturated fattyacid.
OR
b Briefly discuss the fate of fatty acid during Omega oxidation.
- 12 a What are Phospholipids? Describe the biosynthesis of any two Phospholipids?
OR
b Highlight the steps involved in the formation of Bile.
- 13 a What is Transamination? Explain with suitable example.
OR
b Explain the importance behind compartmentation of Urea cycle?
- 14 a Enumerate the regulation of deoxyribonucleotides by inhibitors.
OR
b Explain he steps in the catabolism of Pyrimidine nucleosides.
- 15 a Explain the formation and degradation of Glutathione by Gamma glutamyl cycle.
OR"
b Write a brief note on Conjugation reaction.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Narrate the steps involved in the Beta oxidation of fatty acid.
- 17 Explain how Eicosanoids are formed from C20 Polyunsaturated fattyacids.
- 18 F'xplain the degradation of (i) Tryptophan and (ii) Phenyl alanine
- 19 Describe the sequential reactions in the biosynthesis of Purine from Ribose-5-phosphate and ATP.